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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/623,922	07/21/2003	Sheila F. Kia	GP-302786	5379

7590 04/22/2005  
Kathryn A. Marra  
General Motors  
Legal Staff, Mail Cide 482-C23-B21  
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EXAMINER
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BISSETT, MELANIE D

ART UNIT	PAPER NUMBER
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1711

DATE MAILED: 04/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

WFS

<b>Office Action Summary</b>	<b>Application No.</b> 10/623,922	<b>Applicant(s)</b> KIA ET AL.	
	<b>Examiner</b> Melanie D. Bissett	<b>Art Unit</b> 1711	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 March 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) 1-7 and 15-17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 8-14 and 18-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 July 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>7/03; 6/04</u> . | 6) <input type="checkbox"/> Other: _____  |

***Election/Restrictions***

1. Applicant's election with traverse of Group II, claims 8-14 and 18-23, in the reply filed on 14 March 2005 is acknowledged. The traversal is on the ground(s) that the groups are searchable together, and searching the claims would not present a burden on the examiner. This is not found persuasive because, although certain parts of the search may overlap, the inventions would require a separate search strategy, as supported by the different classes of invention.

The requirement is still deemed proper and is therefore made FINAL.

***Specification***

2. The abstract of the disclosure is objected to because it contains more than 150 words. Correction is required. See MPEP § 608.01(b).

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: part 10 of Figure 1. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the

examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 8-14 and 18-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sekisui Chem in view of McBain et al. McBain et al. (US 5,777,053) and Sekisui Chem (JP 2001-150559) can be found on the applicant's Form PTO-1449. A machine translation for JP 2001-150559 has been provided for the applicant's convenience.

6. Sekisui Chem discloses fiber-reinforced molding articles having a fiber-reinforced molding, a surface layer, and an intermediate filled polyester layer (abstract). A cured unsaturated dicyclopentadiene polyester resin is used for the reinforcing and intermediate layers [0009], and the gel coat surface layer may be an unsaturated polyester material [0013]. Examples show a cured polyester gel coat resin, a filled polyester intermediate layer, a cured fiber-containing polyester intermediate layer, and a glass fiber-containing dicyclopentadiene unsaturated polyester resin as a reinforcing layer. Thus, the reference teaches a gel coat layer, a fiber-containing cured polyester laminate layer, and at least one intermediate barrier layer. It is the examiner's position

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that the fiber-containing intermediate layer 22 can be considered as part of the barrier layer, as part of the fiber-reinforcement layer, or as a separate intermediate layer altogether which is not excluded by the claims. The reference teaches the claimed thicknesses for the layers [0018] and also teaches the claimed fiber lengths (examples).

7. However, the reference does not specify the use of a polyester polyurethane acrylate resin gel coat or the gloss retention of the gel coat layer. McBain teaches in-mold coatings having paint-like properties and having high gloss comprising cured saturated polyester urethane acrylates (col. 1 line 66-col. 2 line 12). The coatings may be applied to fiber-reinforced plastics (col. 5 line 66-col. 6 line 4) and have high gloss values and high gloss retention after accelerated weathering. Although it is not clear whether the testing parameters in the McBain reference are the same as those currently claimed, it is the examiner's position that the McBain reference teaches the claimed gloss retention, since the materials used are the same as those employed by the applicant. Also, it is noted that the claim does not specify an exposure time. It seems likely that a coating would maintain its gloss after UV exposure for at least short periods of time. Since McBain teaches coatings for in-mold applications having improved gloss, hardness, water resistance, and shrinkage properties (col. 2 lines 3-8), it is the examiner's position that it would have been prima facie obvious to use such a coating in Sekisui Chem's articles. Also, since McBain teaches that suitable end uses for in-mold articles include certain automotive parts, it is the examiner's position that it would have been prima facie obvious to use articles of Sekisui Chem's teachings for forming automotive parts to produce parts having improved strength and inter-laminar adhesion.

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8. Regarding the density of the laminate layer, Sekisui Chem does not specify the density of the fiber-containing reinforcing layer. However, since the reference teaches the same resin materials, glass fibers, and glass fiber amounts, it is the examiner's position that the reference also encompasses the claimed laminate layer density.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melanie D. Bissett whose telephone number is (571) 272-1068. The examiner can normally be reached on M-F 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (571) 272-1078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Melanie D. Bissett  
Patent Examiner  
Art Unit 1711

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